Location: 66°24′N, 82°55′W

Size: 7 km²

Description: Turton Island lies in Foxe Basin, just off the southeast coast of the Melville Peninsula, about 140 km east of the community of Repulse Bay. The island is dotted by a few small ponds. Foreshore flats extend off the north side of the island.

Biological value: The colony of nesting Common Eiders (presumably *S. m. borealis*; Abraham and Finney 1986) nesting on this island appears to be similar in size to the well-surveyed colony at East Bay, Southampton Island (3800–5900 pairs), which is one of the largest colonies of Common Eiders in the Canadian Arctic (Abraham and Ankney 1986; Gaston et al. 1986). The colony at Turton Island likely represents just under 2% of the Canadian population of *S. m. borealis*. More data are needed to confirm the importance of this site, but it appears that it is one of the largest Common Eider colonies in the eastern Canadian Arctic. Large colonies such as this may also act as "source" populations, which produce young that eventually settle and reproduce elsewhere in the region.

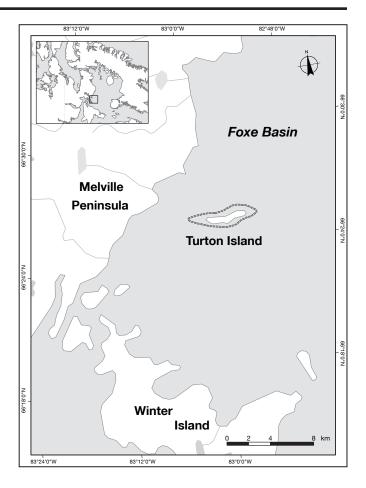
Based on studies at East Bay, Southampton Island, the eiders migrate into the area in late May; by early June, with the breakup of ice around the nesting islands, they have moved onto the colonies and initiated nesting. Once the clutch has been laid and incubation begins, males leave the colony and moult elsewhere. Ducklings hatch throughout July and early August; shortly thereafter, the females and ducklings likely leave the nesting island (Nakashima 1986).

Other bird species nesting on Turton Island include Tundra Swans, Canada Geese, Atlantic Brant, Black Guillemots, Herring Gulls, and Arctic Terns (Environment Canada 1984).

Sensitivities: Nesting eiders are sensitive to disturbance at the colony and will desert the colony site altogether if disturbance is persistent. The occurrence and success of colonies are highly dependent on the presence of small isolated islands, which are less accessible to predators. Pollution, particularly hydrocarbons, in the surrounding marine environment may be detrimental to the eiders.

Potential conflicts: None.

Status: This key site is an Important Bird Area in Canada (NU021; IBA Canada 2004).



Location: 68°40'N, 93°00'W

Size: 9267 km²

Description: The Rasmussen Lowlands extend along the east side of Rae Strait and the Rasmussen Basin, from the south shore of Netsilik Lake to approximately 45 km north of Chantrey Inlet. The nearest settlement is Taloyoak (Spence Bay), located 55 km north of the site.

The lowlands, Paleozoic in origin, represent an area of recent marine emergence. The southern portion is flat and poorly drained, covered with marine silts and sands and an occasional esker or rock outcrop. Approximately 10 km north of Inglis River, the marine sediments are penetrated by glacial moraine, forming the gently rolling Ross Hills. The escarpment of the Wager Highlands occurs along the eastern edge of this site.

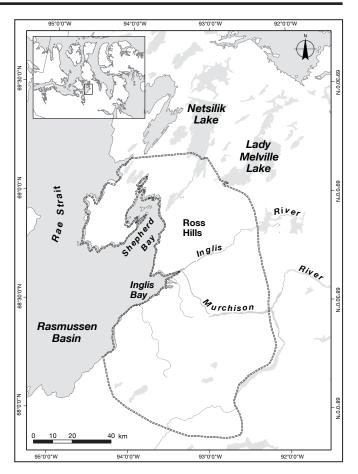
Habitats in the lowlands vary from partially vegetated dry tundra to densely vegetated sedge marsh. Tussocky sedge meadows and sedge marshes predominate. Numerous lakes and ponds are scattered throughout the lowlands.

Biological value: The lowlands support a high diversity and density of summering birds. Surveys performed in 1975–1976 recorded 46 species, 35 of which were confirmed breeders (McLaren et al. 1977). Surveys conducted in 1994–1995 documented significant changes in abundance for a wide variety of species (Gratto-Trevor et al. 1998; Johnston et al. 2000; J.E. Hines, unpubl. data).

Red Phalaropes formerly accounted for 40% of all shorebird sightings on the lowlands and were estimated at 130 000–190 000 individuals. The recent surveys place the estimate at 38 000 (4.2% of the Canadian population). Blackbellied Plovers and American Golden-Plovers have exhibited similar declines, from populations of 30 000 for each species in 1975-1976 to 5000 Black-bellied Plovers and 6000 American Golden-Plovers in 1994–1995. Despite the declines, these local populations represent 3% and 6% of the Canadian populations of these species, respectively (Donaldson et al. 2000). The area also holds >30% of Canada's Buff-breasted Sandpipers, nesting primarily in the southern portion of the lowlands. Buff-breasted Sandpipers are a species of high concern in the Canadian Shorebird Conservation Plan (Morrison et al. 2001). The area also supports roughly 28 000 Pectoral Sandpipers, or 11% of Canada's population, 27 000 White-rumped Sandpipers (5%), and 4000 Baird's Sandpipers (1%). These numbers, however, do not take into account the turnover of birds moving farther north and the importance of the lowlands to migrating individuals.

The local population of King Eiders was estimated at 23 000 individuals in 1975–1976, while surveys in 1994–1995 placed it at 6000 (2% of the Canadian population). Long-tailed Ducks appear to have declined from roughly 9000 to 2000 individuals over the same time period (Hines et al. 2003).

In contrast, several species have shown dramatic increases since 1976. Population estimates for Lesser Snow Geese rose from 3800 in 1975–1976 to 38 200 in 1994–1995 (1% of the Canadian population of Lesser Snow



Geese). Over the same time period, estimates for Greater White-fronted Geese rose from 7000 to 15 300 (4.6% of the Mid-continent Population) and for Cackling Geese, from 500 to 3700 (Hines et al. 2003).

The Rasmussen Lowlands are the most important nesting area in the eastern Arctic for Tundra Swans. The population appears to be stable, estimated at 3800 in both 1975–1976 and 1994–1995 (Hines et al. 2003) (3.8% of the Eastern Population).

Along the eastern border of the site, an escarpment rising to the Wager Highlands provides nesting sites for over 30 pairs of Peregrine Falcons (Shank 1995).

Sensitivities: Wetland areas are susceptible to terrain disturbance through the disruption of natural drainage patterns and the melting of permafrost. Wildlife in the area is sensitive to disturbance. Pollution of offshore waters would result in the degradation of shoreline habitats.

Potential conflicts: This key site and surrounding area are considered to have moderate to high mineral potential, and some mineral exploration has occurred.

Status: About one-third of the area is designated as a Ramsar site (Wetland of International Importance) (Ramsar 2005). The Rasmussen Lowlands is the only Ramsar site in the Canadian North with no legal protection. This key site is an Important Bird Area in Canada (NU006; IBA Canada 2004).

Location: 68°43'N, 101°58'W

Size: 370 km²

Description: Jenny Lind Island, bordered by Queen Maud Gulf to the south and Victoria Strait to the north, lies approximately 20 km off the southeastern corner of Victoria Island. The community of Cambridge Bay is located 120 km to the northwest.

The island lies within the Victoria Lowland Division of the Arctic Lowlands Physiographic Region (Bostock 1970). This region was subject to complete marine inundation during the last glacial period (Prest et al. 1966). It has low, undulating to at relief, with several rocky and sparsely vegetated ridges having a maximum elevation of 80 m. Most of the coastline is sandy with scattered rocks.

Biological value: The population of Lesser Snow Geese on Jenny Lind Island grew from a few hundred geese in the 1960s (Parmelee et al. 1967) to more than 50 000 adult geese in 1985 and represented 2–3% of the Canadian population at that time (McCormick and Poston 1986). More recent surveys indicated 38 000 nesting adults in 1988, 25 000 ightless adults in midsummer 1990, and 19 000 nesting adults in 1998. Therefore, the number of geese using the island seems to have declined since 1985 (Kerbes et al. 2004; R.H. Kerbes and J.E. Hines, unpubl. data).

Lesser Snow Geese nest in the north-central part of the island, but broods disperse throughout most the island (except the sparsely vegetated southeastern corner). In 1985, the main concentration of birds was in the central low-lying portions, which contain numerous wetlands and extensive sedge meadows (McCormick and Poston 1986).

In 1988, it was estimated that 900 Ross's Geese nested on the island. In 1998, slightly over 500 Ross's Geese nested there (R.H. Kerbes, unpubl. data).

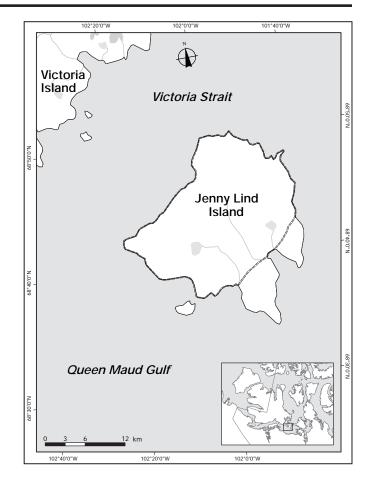
In 1985, an estimated 1500 Cackling Geese were found scattered over most of the island, with the exception of the southeastern and northern areas. The majority of these were moulting and non-breeding birds (McCormick and Poston 1986). Over 1000 Cackling Geese were present on the island in 1990 (J.E. Hines and R.H. Kerbes, unpubl. data).

Given the habitat on Jenny Lind Island, it is likely that the island supports high numbers of various shorebird species (Parmelee et al. 1967), but this has yet to be assessed (V.H. Johnston, pers. commun.).

Sensitivities: Nesting, staging, brood-rearing, and moulting waterfowl are sensitive to disturbance and the degradation of low-lying habitats. The number of Snow Geese on the island is very large relative to the amount of lowland habitat there. This could result in long-term loss of habitat.

Potential conflicts: None.

Status: This key site is an Important Bird Area in Canada (NT088; IBA Canada 2004).



Location: 68°45'N, 112°30'W

Size: 7798 km²

Description: Southwestern Victoria Island slopes gently southwestward towards Lady Franklin Point. It is an area of nearly continuous cover of tundra vegetation consisting of willow, dwarf birch, Labrador tea, *Dryas* spp., and *Vaccinium* spp. The area falls within the Northern Arctic ecozone and has a low Arctic ecoclimate, with a mean summer temperature of 2°C, winter temperature of –28.5°C, and annual precipitation of 100–200 mm (Kirkwood et al. 1983; Environment Canada 1986).

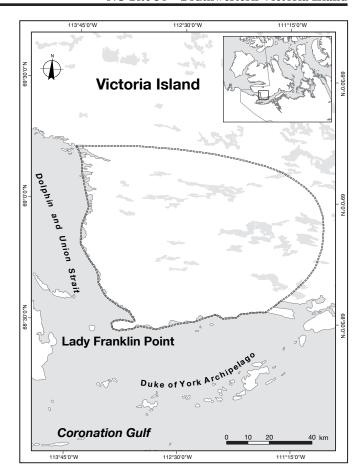
Biological value: Southwestern Victoria Island has one of the highest densities of breeding pairs of Canada Geese in the western Canadian Arctic (2.2 pairs/km²) (Hines et al. 2000). An estimated 25 000 geese, or 8% of the Short-grass Prairie Population of Canada Geese, occur within this site. In the same area, there are an estimated 4800 King Eiders (1–2% of the western Arctic population) (Dickson et al. 1997) and 70 Yellow-billed Loons (perhaps 1% of the western Arctic population) (Cornish and Dickson 1996).

Other species that are relatively abundant include Tundra Swans (2000) (2% of the Canadian population), Glaucous Gulls (1000), and Arctic Terns (700) (Cornish and Dickson 1996). Shorebird species that occur in this region include Semipalmated Sandpiper, Pectoral Sandpiper, White-rumped Sandpiper, Stilt Sandpiper, and Red Phalarope (McLaren and Alliston 1981).

Sensitivities: The well-vegetated wetlands that support the highest bird densities are sensitive to disturbance, and recovery would be slow. Most bird species are sensitive to disturbance during nesting season, when human activity could seriously jeopardize their breeding success.

Potential conflicts: There have been considerable prospecting and mining exploration on Victoria Island in recent years. Low-level aircraft traffic in support of these activities may cause excessive disturbance during critical times, such as the breeding season (May through July).

Status: None.



Location: 67°00'N, 100°30'W

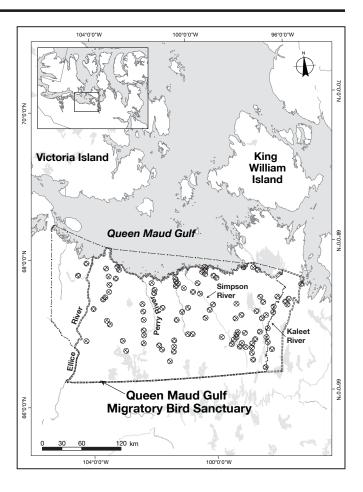
Size: 52 535 km²

Description: The northern border of this site is bounded by Queen Maud Gulf and is situated approximately 75 km south of the community of Cambridge Bay. The landscape is dominated by a generally flat plain of postglacial marine emergence, which extends approximately 135 km inland from the coast. The lowland consists of Precambrian bedrock overlain with glacial till and marine clays and silts. Relief is provided by rock outcrops, drumlins, and old beach ridges that are most evident in the southern and western regions of the lowlands. The vegetation consists of wet sedge meadows and marshy tundra in low-lying areas, interspersed with upland plant communities of lichen – moss – vascular plant associations (Ryder 1969).

Biological value: In 1982, an estimated 90 800 Ross's Geese nested in association with approximately 106 000 Lesser Snow Geese in Queen Maud Gulf Migratory Bird Sanctuary. By 1988, the numbers had increased considerably to 188 000 Ross's Geese and 279 000 Lesser Snow Geese (Kerbes et al. 2004). In 1998, there were at least 73 Lesser Snow and Ross's goose colonies in the area, most of which were in the sanctuary. A few additional colonies are located outside the sanctuary, but within 15 km of its eastern boundary. Numbers of nesting Lesser Snow Geese and Ross's Geese numbered 721 000 and 539 000, respectively, in 1998 (Kerbes et al. 1999). These most recent counts made up approximately 15% of the Lesser Snow Geese nesting in Canada and >90% of the nesting Ross's Geese in the world (Kerbes 1994; Moser 2001).

Aerial surveys carried out in 1990 and 1991 indicate the importance of the key site to a number of other species of waterfowl, including Cackling Geese (55760 birds), Brant (4105 birds, probably mostly Pacific Brant from the Pacific Flyway), Greater White-fronted Geese of the Midcontinent Population (94455), Tundra Swans of the Eastern Population (14771), King Eiders (14812), Northern Pintails (25 043), and Sandhill Cranes (13 162) (Alisauskas 1992). None of these counts is adjusted for "visibility bias," and adjusted counts would certainly have reflected well over 1% of each of the different Canadian populations in the early 1990s. The Ellice River is an important moulting area for large Canada Geese (B. c. maxima and B. c. moffitti) from more southerly breeding areas. In 1986, about 8500 birds (2% of the Canadian population at that time; Alexander et al. 1991) moulted along the river (McCormick and Bromley 1990; cf. Alexander 1990). Geese arrive in late May. Brood rearing and moulting occur throughout the area, and geese begin leaving during the last week of August.

The lowlands south of Queen Maud Gulf feature some of the most extensive wetlands in the mid-Arctic. Like the Rasmussen Lowlands, they likely harbour many thousands of shorebirds and songbirds. The populations of these species have been described in anecdotal terms only (e.g., Gavin 1947; Hanson et al. 1956).



Caribou from the Ahiak herd calve within the key site, and large numbers of muskoxen are present within the sanctuary. Ringed seals are the most abundant marine mammal found in offshore waters.

Sensitivities: Moulting, nesting, and brood-rearing birds are sensitive to disturbance. Low-lying habitats are sensitive to terrain disturbance. As witnessed in some parts of the Hudson Bay region, increasing numbers of Snow Geese and Ross's Geese could cause long-term destruction to lowland tundra habitat on which many species of birds depend.

Potential conflicts: This area of the central barrens has received, and continues to receive, considerable diamond and mineral exploration. There has been pressure in the past to allow mineral prospecting in the Queen Maud Gulf Migratory Bird Sanctuary. Low-level aircraft and camps associated with this activity are possible sources of disturbance to nesting and migratory birds.

Status: Most of this key site is within the Queen Maud Gulf Migratory Bird Sanctuary. The sanctuary has also been designated as a Ramsar site (Wetland of International Importance) (Ramsar 2005), an Important Bird Area in Canada (NU009; IBA Canada 2004), and an International Biological Programme Site (Site 4-8; Beckel 1975).

Location: 65°55'N, 100°20'W

Size: 1661 km²

Description: This site encompasses the Back River, from a point 10 km east of the McKinley River downstream 70 km to the west end of Pelly Lake. It also includes all northern and southern bays of Pelly Lake, Upper Garry Lake, Garry Lake, and Lower Garry Lake to 99°W. The site is situated approximately 240 km northwest of the settlement of Baker Lake.

Pleistocene glacial features are evident in this area of low relief (Wright 1967). Drumlins with continuous and discontinuous eskers, which are oriented in a north–south direction, are common. Silt, sand, and gravel predominate along the river–lake system. The underlying bedrock is of Proterozoic origin, consisting mainly of granitic and allied rocks (Wright 1967). Wet sedge–graminoid meadows occur along stream and lake banks (Sterling and Dzubin 1967).

Biological value: In the 1960s, this site supported up to 3000 moulting large Canada Geese (*B. c. maxima* and *B. c. moffitti*) (Sterling and Dzubin 1967). In 1984 and 1986, respectively, an estimated 9800 and 32 300 Canada Geese moulted in the area (McCormick and Arner 1986; McCormick and Bromley 1990; using the estimation procedure in Alexander 1990). The higher estimate represented about 8% of the continental population of large Canada Geese (Alexander et al. 1991).

Pre-moulting flocks generally arrive about mid-June. By mid-August, the geese have regained their ability to fly and begin to leave the area (Kuyt 1966; Sterling and Dzubin 1967). The geese feed on the sedge–graminoid meadows and use the waters of the streams and rivers as retreats during the moulting period (Sterling and Dzubin 1967).

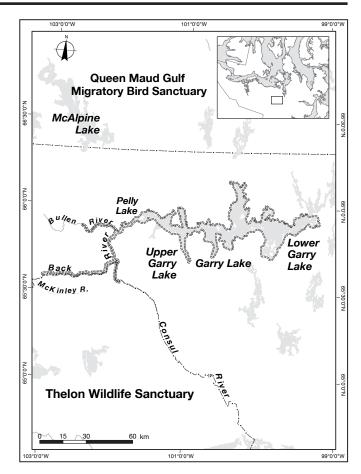
There are several small colonies of nesting Lesser Snow Geese in the Pelly Lake area. Numbers of adults (breeders and non-breeders) increased from about 360 in 1984 to 2200–2600 in 1986 and to over 9000 in 1987 (McCormick 1988). The increase was attributed to late spring snow conditions at Queen Maud Gulf nesting colonies. In 1988, 8000–8300 Snow Geese were counted, even though there was a more typical spring farther north (McCormick 1989).

The calving grounds for the Beverly caribou herd lie along the southern boundary of this area.

Sensitivities: Moulting geese are sensitive to disturbance.

Potential conflicts: This area of the central barrens has received, and continues to receive, considerable diamond and mineral exploration. Low-level aircraft and camps associated with this activity are possible sources of disturbance to nesting and migratory birds.

Status: The southwestern end of the key site borders the Thelon Wildlife Sanctuary. It is an Important Bird Area in Canada (NU089; IBA Canada 2004).



Location: 67°00'N, 95°21'W

Size: 2649 km²

Description: This site includes an area along the lower Back River from the junction of the Herman River downstream, along the southern and eastern shores of Franklin Lake, to the junction of the Hayes River and north to Cockburn Bay. The site varies from 5 to 60 km in width and occurs approximately 200 km north of the settlement of Baker Lake.

The shoreline of Franklin Lake is rocky and poorly vegetated. There is a network of channels interspersed with extensive sandflats and mudflats and the mouth of the Back River. In spring, the Hayes River is one of the first areas with open water in this region (Allen and Hogg 1979).

Biological value: The status of this area as a key habitat site is tentative; the available data are inadequate for a full assessment.

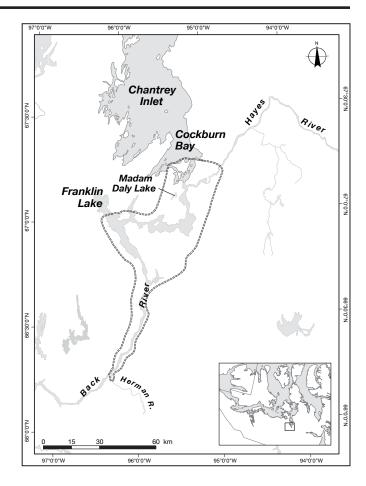
This site may be an important spring staging area, particularly around the confluence of the Hayes and Back rivers, where the presence of open water attracts spring migrants. A single aerial survey was flown each spring in 1976 and 1977. In 1976, there were 762 Canada Geese, nearly 600 Lesser Snow Geese, 724 Brant, and 236 Tundra Swans (Zdan and Brackett 1978). In general, fewer birds were seen in 1977; the exception was 409 Tundra Swans (Allen and Hogg 1979). Small numbers of Sandhill Cranes, King Eiders, scoters, loons, and shorebirds were also noted. However, single surveys at staging areas are not adequate for determining extent of use by migrants.

The lower reaches of the Back River, its tributaries, and the southern and eastern shores of Franklin Lake are used by moulting Canada Geese and Lesser Snow Geese. Over 900 Canada Geese (likely subspecies *B. c. maxima*; Dzubin et al. 1978) were recorded between the Herman River and Chantrey Inlet in mid-July 1976. Approximately 620 birds were recorded in early July 1977 (Allen and Hogg 1979). In 1984 and 1986, the numbers of moulting geese were estimated at 1660 and 2900 birds, respectively (McCormick and Arner 1986; McCormick and Bromley 1990; using estimation procedure in Alexander 1990). The latter estimate probably exceeded 1% of the Canadian population of *B. c. maxima* (Alexander et al. 1991).

Over 4700 moulting and brood-rearing Lesser Snow Geese were also recorded in the same area on 12 July 1976. Far fewer Snow Geese were seen in 1984 and 1986 (McCormick and Arner 1986; McCormick and Bromley 1990). A small number of geese breed in the area, probably around Madam Daly Lake (McLaren et al. 1977).

Sensitivities: Breeding, moulting, and staging waterfowl are sensitive to both aircraft and ground-based disturbance. Lowland habitats and permafrost environments are susceptible to terrain disturbance and degradation.

Potential conflicts: This area of the central barrens has received, and continues to receive, considerable diamond and mineral exploration.



Status: None.

Location: 64°30′N, 101°45′W

Size: 1873 km²

Description: This area includes the Thelon River from Eyeberry Lake to Beverly Lake, the Ursus Islands area, the shores of Beverly Lake, and the west half of Aberdeen Lake (to 99°10'W) and 20 km upstream along the Dubawnt River. Baker Lake is 150 km east of the eastern end of this area.

The underlying rock formation is Precambrian sand-stone, much of which is obscured by low-relief Pleistocene deposits. The area around Lookout Point is within a sand-silt formation. The Ursus Islands area is largely sandstone and pebbly sandstone (Bird 1951). Most of the Beverly Lake – Aberdeen Lake region is underlain by Dubawnt sandstone. The low and rolling area is covered with unbroken glacial till, which has been sorted into expanses of sand and pebbles. Continuous and discontinuous eskers are common. A late glacial lake inundated much of the area; strandlines and wave-cut beaches are evident (Bird 1967). A large delta occurs on the south side of Beverly Lake.

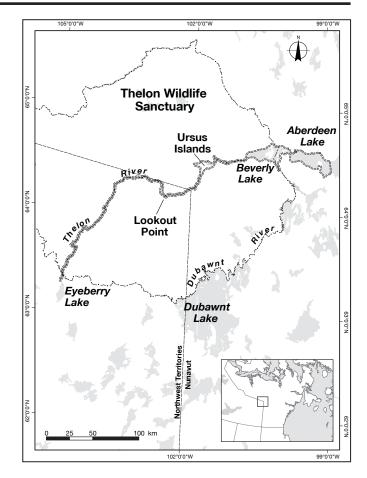
The vegetation belongs to the northern transition section of the boreal forest, giving way to Low Arctic around Beverly Lake. From Lookout Point to Ursus Islands, the river banks are wooded with spruce, larch, and willows. The river banks between Ursus Islands and Beverly Lake are high but not precipitous. Adjacent wet sedge meadows and moss-sedge complexes provide suitable grazing areas for geese. A few stunted spruce are found in gullies.

Biological value: Between 10 000 and 13 000 non-breeding Canada Geese, originating in the northern United States and southern Canada, use this area to moult (Kuyt 1966; Alexander 1990). Most of the geese belong to the *B. c. maxima* and *B. c. moffitti* subspecies (Sterling and Dzubin 1967). There is some indication that birds in the western part of the area are from the Pacific, Hi-Line Plains, and Rocky Mountain populations, whereas those east of Beverly Lake are from the Western Prairie and Manitoba Interlake populations (Kuyt 1966; Sterling and Dzubin 1967). The larger estimate of Canada Geese represented 3% of the Canadian population of the two subspecies (Alexander et al. 1991). Flocks of Canada Geese generally appear in mid-June and depart soon after moulting is completed in mid-August (Sterling and Dzubin 1967).

Greater White-fronted Geese are known to breed in the area. In 1960, Kuyt (1962) reported 30 broods between Beverly and Aberdeen lakes. Tundra Swans also breed and moult west of Beverly Lake. Islands in Beverly Lake provide habitat for some of the few inland breeding colonies (numbering up to 140 pairs) of Lesser Snow Geese (Alexander 1990).

Raptor nesting areas are found on the north shores of Beverly and Aberdeen lakes (Kuyt 1980).

Calving grounds for the Beverly caribou herd lie along the northern boundary of the area. Several river crossings used by the herd occur in this area.



Sensitivities: Flightless geese are sensitive to disturbance during their moult.

Potential conflicts: The surrounding area has high potential for uranium. The proposed Kiggavik uranium mine site is located southeast of Aberdeen Lake.

Status: Most of this site occurs within the Thelon Wildlife Sanctuary, which has a subsurface land withdrawal. It is an Important Bird Area in Canada (NU091; IBA Canada 2004) and an International Biological Programme Site (Site 4-6; Beckel 1975).

Location: 65°25′N, 93°35′W

Size: 1391 km²

Description: This site includes approximately 210 km of the Quoich River valley, from a point 40 km north of its junction with Chesterfield Inlet to 66°N latitude. The east end of Tehek Lake, Tehek River, Lunan Lake, and Lunan River are also included. The area occurs approximately 100 km east and northeast of the settlement of Baker Lake.

The Quoich River flows through a broad, open valley containing many scattered lakes and ponds. Bedrock of Precambrian origin, consisting mainly of granitic and allied rocks, occupies much of the area (Wright 1967). Eskers are common in the upper river basin. Stony and sandy glacial tills and fluvial deposits are common throughout the lower river valley. Numerous small lakes and localized wet meadows and associated tussocks make the area attractive to moulting geese.

Biological value: The status of this area as a key habitat site is tentative; the available data are inadequate for a full assessment.

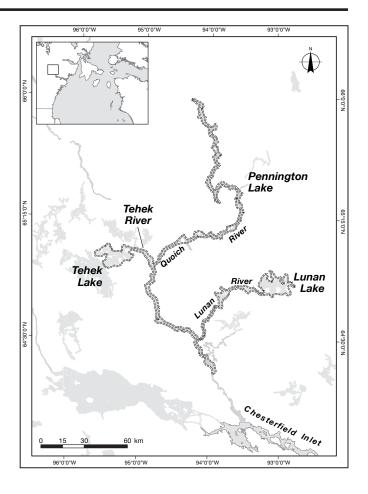
This site is a summer moulting ground for several thousand large Canada Geese (probably part of the Eastern Prairie Population; B. c. interior). A maximum of 3400 birds was noted in July 1966 (Sterling and Dzubin 1967), which was about 1% of the Canadian population of the B. c. interior subspecies at that time. Some Giant Canada Geese (B. c. maxima) may moult in this area from late June to early August. A small number of Canada Geese (3.5 birds per linear kilometre) were found on 168 km of river in late August 1975 (McLaren et al. 1976). Canada Goose populations have expanded markedly over the last 20 years. Recent studies have shown that moulting Canada Goose numbers have increased along parts of the Back River (McCormick and Bromley 1990) but that they have not increased along the Thelon River (Alexander 1990). Moulting geese feed on the sedge-grass meadows near the river and use the rivers and lakes as retreats during the flightless period (Sterling and Dzubin 1967). Canada Geese generally arrive by mid-June and leave by late August (Sterling and Dzubin 1967). Further investigations are needed to determine the number of birds currently using the Quoich River site.

The upper valley of the Quoich, including the Brown River valley lying directly west of Wager Bay, is an important summering and wintering area for caribou (Calef and Heard 1979).

Sensitivities: Flightless geese are sensitive to disturbance during their moult.

Potential conflicts: None.

Status: None.



Location: 60°50'N, 94°20'W

Size: 5092 km²

Description: This area includes coastal habitats between the Thlewiaza River and the Maguse River on the west coast of Hudson Bay. The area is underlain by Precambrian rock of the Canadian Shield; however, there are very few rock outcrops near the coast, particularly south of Austin Island. The landscape has a low relief, rising to about 60 m in the western portion of the area. Extensive marsh flats occur along the coast, extending 3–8 km inland. Farther inland, there are low hills and numerous lakes.

Biological value: The McConnell River key site is an important breeding ground for Lesser Snow Geese, Ross's Geese, and Canada Geese. The coastal sedge lowlands provide nesting habitat for the Snow Geese, whereas the adjacent ponds, lakes, and inland areas are critical for feeding and moulting. In late summer, a large number of young and non-breeders as well as moult migrants are present within the key site. Numbers of nesting Snow Geese at the site have varied greatly over the years. Numbers increased from 390 000 nesting geese in 1973 to 436 000 nesting geese in 1982 (Kerbes 1975, 1982). Subsequently, the nesting population declined to 212 000 in 1997 (Kerbes et al. 2004). The decline is thought to have resulted from overgrazing of lowlands by the increased numbers of resident and transient geese using the site (Kerbes et al. 1990; Didiuk et al. 2001). Most recent counts represented about 5% of the Canadian population of Lesser Snow Geese.

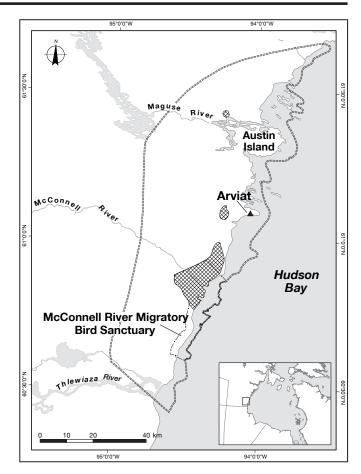
In 1994, there was a major influx of Ross's Geese into the region (Kerbes et al. 2004); by 1997, there were at least 23 000 Ross's Geese nesting at a relatively small site near the McConnell River. The nesting geese represented about 4% of the Canadian, continental, and world population of Ross's Geese in the late 1990s. Snow Geese and Ross's Geese reach the nesting areas by late May and move to inland feeding areas by the third week in August. Few birds remain in the area after the beginning of September.

Canada Geese are likely numerous enough (i.e., numbering in the several thousands and thereby constituting >1% of the Tall-grass Prairie Population). At least 111 bird species have been recorded for the McConnell River area, including "extra-limital" sightings of prairie and forest species.

Barren-ground caribou of the Qamanirjuak herd winter along the Hudson Bay coast from the Manitoba border to Arviat. Ringed seals, beluga, and polar bears frequent coastal and offshore waters.

Sensitivities: Lowland areas are susceptible to terrain disturbance through the disruption of natural drainage patterns and the melting of permafrost. Geese and other wildlife are sensitive to disturbance by human activities.

Potential conflicts: Dramatically increased numbers of Lesser Snow Geese are possibly having a detrimental and long-term impact on the lowland tundra.



Status: Part of this area lies within the McConnell River Migratory Bird Sanctuary. The key site is a Ramsar site (Wetland of International Importance) (Ramsar 2005), an Important Bird Area in Canada (NU020; IBA Canada 2004), and an International Biological Programme Site (Site 5-3; Beckel 1975).

Location: 63°45′N, 85°40′W

Size: 6120 km²

Description: Boas River is located on southwestern Southampton Island at the northern extremity of Hudson Bay. The area is underlain by Paleozoic limestone and is covered with glacial drift and beach deposits. There is little relief; much of the area lies below 60 m elevation. The Boas River flows southward through the area, across an extensive sedge lowland, and empties into the Bay of Gods Mercy. Numerous lakes are scattered throughout the lowlands. Extensive tidal flats are found along most of the coastline. A recurring polynya occurs near Cape Kendall in Roes Welcome Sound (Stirling and Cleator 1981).

Biological value: Slightly over 10% of the nesting Lesser Snow Geese in Canada occurred in the key site in 1997 (Kerbes et al. 2004), similar to the proportion that occurred there in 1979 (Reed et al. 1987). The largest colony is situated around the Boas River delta. Smaller concentrations are located at Ell Bay, Bear Cove, and along 20 km of coastline west of the Boas River colony. There was a fourfold increase in numbers of geese nesting in the area between 1973 and 1997. The nesting population increased from 139 000 geese in 1973 to 190000 geese in 1979 and to over 560000 geese in 1997 (Kerbes 1975; Reed et al. 1987; Kerbes et al. 2004). Feeding habitat for geese extends inland from the nesting area and includes adjacent marsh and sedge lowlands. Snow Geese arrive in late May or early June. Non-breeding Snow Geese leave the area in mid-August, followed by the breeding birds in early September.

The Boas River area also supports nesting populations of Atlantic Brant, Cackling Geese, and Tundra Swans.

The Roes Welcome Sound polynya is a wintering area for beluga, walruses, and harbour seals. Polar bears, bearded seals, and ringed seals are present year-round. Bowhead whales and narwhals use the polynya as a summer feeding area (Stirling and Cleator 1981).

Barren-ground caribou (which were reintroduced to Southampton Island in 1967; Parker 1975) and arctic foxes occur throughout the key site.

Sensitivities: The lowlands are susceptible to terrain disturbance through the disruption of natural drainage patterns and the melting of permafrost. Geese and other wildlife are sensitive to disturbance.

Potential conflicts: The dramatically increased numbers of Lesser Snow Geese appear to be having a detrimental impact on some portions of the lowland tundra (A.J. Fontaine, pers. commun.), as has been observed elsewhere in the Hudson Bay region.

Status: Part of the site occurs within the Harry Gibbons Migratory Bird Sanctuary. It is an Important Bird Area in Canada (NU022; IBA Canada 2004) and an International Biological Programme Site (Site 6-5; Beckel 1975).

